spectrum, protection of Land Mobile operations, replication of NTSC service, minimization of interference to NTSC service, and equity among DTV stations. In most cases, the results are acceptable. However, in limited areas, the DTV Allotments/Assignments pay for certain of these priorities with the unacceptable diminution of DTV service and interference to NTSC service. There is no way to improve these assignments without, in a limited number of cases, relaxing some of the assumptions and priorities. Below, we identify those priorities and assumptions that should in some instances bend to ameliorate the most troublesome DTV assignments.

### a) <u>Land Mobile Spacing Protections.</u>

The changes effected between the August 1996 Table and the DTV Allotments/Assignments to accommodate spacing between Land Mobile and television operations on channels 14-20 have also contributed to service losses in the Acute Problem Areas. The Sixth R&O (¶ 163) subjects DTV allotments to minimum co-channel (250 km) and adjacent channel (176 km) spacings to the city-center of channel 14 to 20 land mobile operations. Unlike the August 1996 Table, the DTV Allotments/Assignments include only one instance where the 250 km co-channel separation is not met and only nine instances where the 176 km adjacent channel separation is not met. Id. ¶ 164.

Broadcasters have argued that a minimum co-channel spacing of 240 km or less is sufficient to protect Land Mobile and DTV operations when combined with tailored engineering to protect Land Mobile operations in the congested markets.<sup>24</sup> The <u>Sixth R&O</u> (at ¶ 164) concedes that the spacing requirements "were chosen to be very conservative." As

Joint Comments IX at 45.

demonstrated in Exhibit 10, Land Mobile operations have vastly different contours in different cities (although the protection from television is the same and extends beyond the edges of the map). Protecting them all to the same degree in all directions is simply unnecessary. And this excess protection comes at the expense of preserving existing television service in certain regions of the country.<sup>25/</sup> In some limited number of cases, and particularly in the Acute Problem Areas, the Commission should relax the Land Mobile protection criterion to the extent that doing so will better accommodate the objectives of making every DTV allotment/assignment viable and as optimal as possible while causing as little interference as practical to existing broadcast service.

### b) <u>Co-Channel Separations.</u>

Too conservative in terms of Land Mobile separations, the <u>Sixth R&O</u> is not conservative enough with respect to co-channel DTV-to-NTSC separations. Although the <u>Sixth R&O</u> attempts to avoid co-channel DTV and NTSC assignments separated by less than 155 km, complying with this minimum spacing was a low priority in the development of the DTV Allotments/Assignments. DTV assignments spaced less than 155 km from NTSC assignments will lead to unacceptable levels of interference to the public's existing and future service. The Broadcasters' Table, therefore, avoided violating this spacing priority in all but four cases. The August 1996 Table also included only four assignments spaced less than 155

Moreover, the Commission has not afforded the same consistent protection to DTV from Land Mobile. The Sixth R&O assigned 41 DTV channels on channels 14 and one DTV assignment on channel 69 (both of which are adjacent to land mobile operations) without providing these stations the same kinds of spacing protections granted to land mobile operations on channels 14-20. For example, DTV channel 69 in the Los Angeles market is not protected from Land Mobile operations. This case should be examined as part of the Commission's fine-tuning of allotments/assignments in the California coastal region.

km apart. By contrast, the DTV Allotments/Assignments included 66 assignments that violate this spacing priority. Exhibit 11 lists the stations with separations of less than 155 km.

This increased number of violations is particularly problematic for the Acute Problem Areas: 40 in the Northeast Corridor, 10 in the Great Lakes Region and nine in the California coastal region. Exhibit 11 also contains maps that illustrate the interference to new and existing service for sample stations in the Acute Problem Areas due to co-channel short spacing. Increases of the co-channel spacing would provide a fix for some stations that suffer from serious increased interference due to the short-spacing.

### c) <u>Channels 60-69.</u>

Recovery of spectrum occupied by channels 60-69 was one of the highest goals in the development of the DTV Allotments/Assignments. Whereas there were 30 DTV stations assigned to channels 60-69 in the August 1996 Table, there are only 15 such stations in the DTV Allotments/Assignments. Moreover, the rules now state that existing licensees' petitions to amend the DTV Table of Allotments may request allotments only in the range of channels 2-59. This intensification of the priority to keep channels 60-69 DTV-free has resulted in increased interference to the public's future and existing service. For example, DTV channel 6 in Washington, D.C. is paired with NTSC channel 5. The Commission originally proposed to use channel 6, which potentially interferes with FM radio service, "only where there is no other readily available allotment opportunity that would provide for

<sup>62</sup> Fed. Reg. at 26712.

adequate replication of an existing station's service area."<sup>22l</sup> Yet in this case, channel 69 was available for assignment. Exhibit 12 shows the service loss due to the failure to assign a channel in the 60-69 range to channel 5. In addition, the DTV channel chosen (6) causes co-channel interference of 14,354 sq. km to other NTSC stations in Philadelphia and Richmond. Thus, the DTV Allotments/Assignments sacrifice the "best" channel (69) in terms of coverage and interference for the goal of expedited spectrum recovery. <sup>28l</sup> Another example of this sort, this time in Ohio, is included in Exhibit 12. This example shows how assigning DTV channel 65 (rather than channel 19) to WTVG in Toledo would have extended WTVG's DTV service to 108,758 people; it also would have reduced the DTV-to-NTSC interference to a co-channel station in Shaker Heights by about 98% and DTV-to-DTV interference to a co-channel station in Fort Wayne, Indiana by about 86%.

Limited exceptions to the channels 60-69 bar must be made in this reconsideration phase, so as to correct some of the most troublesome allotments/assignments in the Acute Problem Areas. Similar flexibility should be permitted during the transition period.

### d) Power Maximums.

In limited cases, exceptions to the 1000 kW power cap may have to be authorized to ameliorate substantial replication shortfalls. In addition, the Commission should proceed, as promised in the <u>Sixth R&O</u>, to permit limited experimental operations at

<sup>27/</sup> Sixth Further Notice, 11 FCC Rcd. at 10998.

Broadcasters vigorously objected to the core spectrum plan proposed in the Sixth Further Notice, citing the dangers of implementing a core spectrum plan before the transition is complete. Joint Comments IX at 24-42.

power levels above 1000 kW and, in its planned two-year review, to consider an across-the-board relaxation of the cap if appropriate (Sixth R&O  $\P$  30).

# III. THE COMMISSION SHOULD FACILITATE COORDINATED ADJUSTMENT TO THE DTV ALLOTMENTS/ASSIGNMENTS IN THE FUTURE.

The solutions discussed above are best implemented on reconsideration but similar solutions should be entertained as the transition progresses. What is needed for this process is a system whereby such solutions may be proposed in an organized and efficient fashion based on scientific analysis that takes into account the effects of the proposed solution on neighboring stations. It would be dangerously unrealistic to suppose that more than 1600 DTV channels could be assigned without a substantial number of adjustments to the DTV Allotments/Assignments being required, including adjustments after the reconsideration stage. Accordingly, mechanisms must be established to make these post-reconsideration adjustments to the facility configuration, siting, and other aspects of DTV operation easily, quickly and according to objective engineering criteria established by the Commission.

The smooth roll-out of DTV requires a streamlined mechanism for changing DTV channel allotments/assignments.<sup>29/</sup> Instead, the <u>Sixth R&O</u> appears to default to the existing procedure whereby stations must petition for a rulemaking to amend the Table of DTV Allotments and sets forth criteria that broadcasters must meet to obtain consideration

As discussed below in Section IV, the rules for obtaining a construction permit for facilities that do not conform to Appendix B's site, power and height specifications (Fifth R&O  $\P$  71-74) are somewhat cloudy. These must be clarified.

for such petitions. This procedure, having proven so burdensome in the much simpler NTSC world, is unsuited to handle the inevitable flow of proposed adjustments to the DTV Allotments/Assignments especially given the stringent build-out requirements that broadcasters must meet. Thus, Petitioners urge the Commission to adopt an approach that minimizes the number of petitions filed to amend the DTV Table of Allotments and to encourage regional solutions to shared problems.

### A. THE RULES SHOULD FACILITATE EFFICIENT, TECHNICALLY SOUND INTER-MARKET ADJUSTMENTS.

The fact that the DTV Allotments/Assignments effect 1289 channel changes to the August 1996 Table shows how altering a few parameters can drastically affect channel planning. Some fluidity will be necessary going forward as it becomes necessary to revise certain parameters in a region or for a single station. Reasonable channel and facility changes should be permitted and even expedited, in light of the accelerated transition

Without examining the still unreleased OET Bulletin No. 69 -- a document which is necessary to make the showing that changes will not increase interference, it is impossible for the Petitioners to assess how large a hurdle the FCC has set in requiring this showing. Petitioners and others will comment on this issue in a supplemental petition.

When a station now wants to amend the table of allotments (even under 47 C.F.R. 1.420(i) which permits changes to a community of license without a subsequent stage of competing applications for the new allotment), it must go through the time consuming and burdensome sequence of procedures involving a petition for rulemaking, public notice and comment, reply comment, notice of proposed rulemaking, comment, reply comment, decision and reconsideration. The process has taken as long as nine months to resolve from the time an NPRM is issued until a decision is issued, even when the proposal does not involve a change in station's facilities and there is no formal opposition. See Los Angeles and Norwalk, California, Notice of Proposed Rulemaking, 6 FCC Rcd. 2136 (1991), Report and Order, 6 FCC Rcd. 5317 (1991) (six months); Ardmore, Oklahoma and Sherman, Texas, Notice of Proposed Rulemaking, 6 FCC Rcd. 7006 (1991), Report and Order, 7 FCC Rcd. 4846 (1992) (nine months). Resolution of oppositions adds to the process. See Bellingham and Anacortes, Washington, 7 FCC Rcd. 1915 (1992); Report and Order, 7 FCC Rcd. 5453 (1992), recon. denied Memorandum Opinion & Order, 8 FCC Rcd. 460 (1993) (10 months).

schedule set by the <u>Fifth R&O</u>. The rules adopted pursuant to the <u>Sixth R&O</u> warrant slight revision to assist the Commission and broadcasters in perfecting DTV Allotments/Assignments.

For example, Section 73.622(c) appears to facilitate *intra-market* channel changes by permitting stations to consensually exchange assignments and thus exempting them from the laborious petition-for-rulemaking process. But unfortunately, because the <u>Sixth R&O</u> maintains the outdated distinction between "allotments" and "assignments," *inter-market* channel adjustments are difficult to make because they require a petition for rulemaking to amend the DTV Table of Allotments. 32/

This approach has two serious flaws. First, it does not correspond with the realities of the changes that will be requested. For example, in some places like Buffalo, New York, stations serving the same community are located 20 miles away from each other. The rules would make it fairly easy for these stations to swap channels through the streamlined application procedure. However, such a channel exchange would probably not be permitted (or desirable) given the distance of the stations and the interference that would be caused to neighboring communities. Instead, these stations would be better off exchanging channels with stations outside their communities (something that is not expressly

The Sixth R&O does not expressly state whether existing broadcasters that are successful in applying for a new allotment will then have to go through a separate assignment phase, subject to competing applications for any given allotment. Petitioners assume that they will not, but request clarification on this point. In addition, to the extent that the *ex parte* rules (which deem allotment rulemakings restricted proceedings) that govern petitions to amend the table of allotments in the NTSC world are based on the existence of competing interested parties, Petitioners urge the Commission to examine the extent to which the *ex parte* rules should be revised in the DTV context. At the very least, Petitioners believe it is important for parties to be able to have access to FCC staff in working out alternative DTV channel options.

addressed by the rules but should be allowed, if consented to by the affected station, without the filing of a petition for rulemaking to amend the table of allotments). In other cases, stations are collocated that serve different communities. Thus, the station licensed to Secaucus, New Jersey is actually located on the World Trade Center in New York City. Under the rules, this station would not be permitted to exchange channels with a New York City station without undergoing the lengthy petition for rulemaking process to amend the Table of Allotments, even though there are far fewer technical impediments to the swap than there would be in the Buffalo case.

A second problem with the <u>Sixth R&O</u>'s approach is that it takes no affirmative steps to encourage area channel change proposals -- proposals that are critical given the domino effect triggered by many individual channel changes and proposals that may entail an exchange of allotments among different communities.

### B. DTV COORDINATING COMMITTEES.

In addition to eliminating the distinction between "assignment" exchanges and "allotment" exchanges, the <u>Sixth R&O</u> should have taken measures to accelerate and encourage stations' coordination of their proposed changes so as to satisfy the required showing that the changes cause no new interference and fit with other proposed changes. Toward these ends, the Commission should strengthen the industry DTV coordination committee process.

The requirement of no new interference, which we support, is found in Section 73.623(c).

In 1995, Broadcasters proposed the use of private-sector coordinators to work with broadcast stations, regions by region, to assess and propose fixes to the DTV Allotments/Assignments. The Commission was receptive to this idea and requested comment on it in the Sixth Further Notice. Broadcasters not only again elaborated on the idea of regional coordinators in their comments to the Sixth Further Notice but they actually implemented a prototype of this mechanism in ten regions across the country. These regional groups disseminated coverage and interference information about the August 1996 Table, assisted stations in identifying alternative channels, and ultimately worked with more than 660 broadcast stations to support orderly feedback to the Sixth Further Notice.

The Broadcasters Caucus, representing the television networks, associations, and numerous major groups, filed a Petition for Further Rule Making requesting that the Commission establish a DTV coordination process and proposing a plan for the structure, operating rules and composition of the industry coordinating committees. This petition requested that the Commission establish a coordination process using some of the same principles that underlie the Private Land Mobile Frequency Coordinating Committees. DTV coordinating committees would assist in the evaluation and development of DTV facility and

<sup>34/</sup> See Broadcasters' Proposed ATV Allotment/Assignment Approach.

<sup>35/ 11</sup> FCC Rcd. at 10111.

See Joint Comments IX at 47-53 and Broadcasters Caucus Reply Comments at 18-20 (January 24, 1997); see also comments of Harris, LABCTS, Meredith, NBC, Pappas, Rural, and VCY America (November 20, 1996).

See Joint Comments IX at 54-55 & Appendix A.

Broadcasters Caucus Petition for Further Rule Making, MM Docket No. 87-268 (Jan. 10, 1997).

channel changes. These committees would have responsibility for soliciting comment from affected parties and evaluating the proposals and options using the Commission's approved methodology. The Commission would then incorporate the committees' recommendations in a notice of proposed rulemaking, thus avoiding the delay and potential litigiousness of the three-step petition-for-rulemaking process. Moreover, the fact that committees would already have evaluated the proposals and made recommendations based on Commission-endorsed criteria would discourage ill-founded opposition filings. If the committees properly apply the Commission's criteria, their recommendations should be accorded wide deference.

The <u>Sixth R&O</u> in a single paragraph again endorses, but does nothing to effectuate, the functioning of these coordinating committees. This is simply not enough to ensure that industry coordinating committees become an effective reality and an effective tool for moving the transition forward. Such committees will need access to the FCC's evolving database of station facilities and will have to apply the Commission's interference and other assignment criteria.

Petitioners urge the Commission to take steps on reconsideration to establish the DTV coordinating committees, define their appropriate role and provide the tools these committees will need to help broadcasters and the Commission as DTV rolls out.

It states that "an approach similar to that set forth in the Broadcasters Caucus' petition provides an appropriate model for industry coordination of DTV allotment and facility modifications." Sixth R&O ¶ 182.

# IV. THE COMMISSION SHOULD CLARIFY OTHER INCONSISTENCIES AND UNCERTAINTIES TO SMOOTH THE DTV IMPLEMENTATION.

Inconsistencies and uncertainties in both <u>R&Os</u> and the new and amended rules prevent stations from fully assessing and following the course the Commission has charted for DTV. The Commission should clarify and in some instances reconsider discrete portions of its DTV decisions. A first priority is for the Commission to release OET Bulletin No. 69.<sup>40</sup> We have heard from many stations and engineers that without this document, it is impossible to know precisely what operating parameters for the Longley-Rice methodology apply or how to interpret the interference results of proposed channel or facility changes. Described below are other issues the Commission should clarify or reconsider. All of these steps will minimize any disruption of DTV implementation plans caused by confusion about, or challenges to, the new procedures.

## A. THE COMMISSION SHOULD CLARIFY THE PROTECTION PROVIDED TO FULL-POWER STATIONS DURING THE TRANSITION.

### 1. Protection At Least To The NTSC Grade B.

We urge the Commission to revise Section 73.625, which defines DTV coverage for existing licensees, to make explicit that a licensee's DTV coverage contour is at least coextensive with its NTSC Grade B contour. It follows that Section 73.622(e) should provide that an existing licensee will receive interference protection out to its NTSC Grade B contour or DTV coverage contour, whichever is greater. In most cases, as described above in Section I, this is already the case. But for stations subject to the 1000 kW power cap,

In no fewer than five different places the new and modified rules refer to OET Bulletin No. 69 as providing "[g]uidance for evaluating coverage areas using the Longley-Rice methodology," "[g]uidance for evaluating interference," or "[g]uidance on using the Longley-Rice methodology. See 62 Fed. Reg. 26717, 26719, 26721 (Sections 73.622, 623).

there is a discrepancy between (a) the service areas shown in <u>Appendix B</u> for purposes of calculating replication and (b) the service areas that in fact will receive protection under the rules, which is often much smaller. This proposed change would reconcile <u>Appendix B</u> with the new rules and would afford greater protection for these stations.

### 2. <u>Protection Throughout The Transition For All Stations.</u>

Given the proposed build-out deadlines set forth in the Fifth R&O, stations across the country will be in various phases of construction of their DTV facilities from now until 2003. Moreover, as the R&Os make clear, DTV stations may begin operating at power levels or heights lower than those needed for achieving full replication, so long as they serve their communities of license. Some limited flexibility for side-mounting may be necessary in certain cases. This flexibility is intended to enable stations to increase facilities over time and thereby "'grow into'" the power level needed to achieve full replication. Sixth R&O ¶ 33; Fifth R&O ¶ 74 & n.161. The R&Os do not determine how long stations will be permitted to operate at lower-than-authorized power levels but state that the Commission plans to review this policy in two years. Sixth R&O ¶ 33; Fifth R&O n.161.

What is not clear from either <u>R&O</u> or the new rules is whether the Commission will provide full protection at least out to each station's NTSC Grade B contour during these periods of gradual service increases when actual DTV service areas may be less

The transition to DTV is an enormous undertaking for the industry, particularly for small and public stations, and maximum opportunity should be provided for stations to grow into full facilities.

than the paired NTSC Grade B contours. For stations (i) not yet built, (ii) broadcasting from a partially constructed facility, or (iii) operating at less than the authorized power or height assigned in Appendix B, Sections 73.625 and 73.622(e) should clearly indicate that the area to be protected is the NTSC Grade B contour, not the actual, smaller DTV service area. Such protection will avoid robbing viewers of the unfolding DTV service that existing licensees will provide.

- B. THE COMMISSION SHOULD ELIMINATE TRANSITION UNCERTAINTY BY LIFTING THE CLOUD OVER CHANNELS 2-6 AND BY ENSURING NON-CORE STATIONS OF COMPENSATION FOR POST-TRANSITION MOVES.
  - 1. Vulnerability Of Channels 2-6 To Post-Transition Recapture.

In the <u>Sixth Further Notice</u>, the Commission requested comment on its tentative conclusion that channels 2 through 6 are less technically suitable for DTV than are UHF channels, and on its proposal to exclude these channels from the proposed DTV core spectrum. We are pleased that, in response to comments from numerous parties objecting to the exclusion of these channels from the core, the Commission developed the DTV Allotments/Assignments using channels 2-6 without a bias and will consider including these channels in the ultimate core spectrum. Sixth R&O ¶ 83.

As Broadcasters stated in their comments to the <u>Sixth Further Notice</u>, a decision now to exclude channels 2-6, indeed any portion of the broadcast spectrum, from

Broadcasters have in the past advocated that the Commission protect the full contours of all stations throughout the transition and that, in assigning channels to LPTVs, translators, or new DTV licensees, the Commission employ a contour protection methodology rather than a geographic spacing approach. See Joint Comments IX at 49-50.

Sixth Further Notice, 11 FCC Rcd. at 10983.

the final DTV core is problematic. 44/ First, it assumes that certain portions of the band are more hospitable for DTV without the benefit of real world data from the early stages of DTV implementation. There is no certainty about how DTV will in fact play out as more than 1600 stations come on the air; experience will identify the optimal spectrum band into which DTV stations should be repacked. Putting a cloud on the suitability of channels 2-6 now is unjustified, unnecessary and contrary to the public interest.

The disparagement of channels 2-6 is particularly unfortunate given the well-known broad-range propagation characteristics and spectrum efficiency of these channels and the outstanding service that the more than 280 NTSC stations on low-VHF channels have provided to the American public -- in many cases for 50 years. We urge the Commission affirmatively to enhance the effective utilization of channels 2-6 for DTV. In particular, the Commission should take steps to clean up this portion of the spectrum by eliminating some sources of potential noise, including power line leakage and other manmade noise. Doing so would permit numerous stations to return to these channels when the NTSC service is shut off, thus sparing unnecessary costs of rebuilding facilities in the

Joint Comments IX at 35, 40-41. Broadcasters do not oppose give-back of 138 MHz of spectrum at the end of the transition period.

Petitioners believe that channel 6 can be used for DTV, using proper engineering design and safeguards. As stated in previous comments, Broadcasters believe the lower power of DTV transmitters, the improved performance of DTV transmitter out-of-band emissions, and improved DTV receivers will reduce interference between DTV channel 6 and FM radio. See, e.g., Joint Comments IV at 30.

See also Petition for Reconsideration of Decision Regarding Channels 2-6 (May 29, 1996) (urging the Commission not to cast doubt onto the suitability of channels 2-6 for DTV); MSTV Petition for Inquiry (Oct. 4, 1989) (requesting the Commission to initiate an inquiry into the subject of ameliorating the deterioration in broadcast service due to decisions permitting higher levels of interference from non-television sources).

core band. Furthermore, preserving the suitability of channels 2-6 for wide-area television service would advance sensible spectrum management. As others have recognized, there are unlikely to be many bidders for channel 2-6 spectrum, thus rendering the current use most efficient.

### 2. <u>Compensation For Stations Forced To Relocate.</u>

The <u>Sixth Further Notice</u> seemed to look with favor upon a proposed requirement that new entrants compensate broadcasters for the costs of relocating from out-of-core spectrum. In joint comments, Broadcasters supported this proposal. The <u>Sixth R&O</u> takes no further steps to advance this proposal. It notes only that compensation for full and low power stations operating in channels 60-69 will be considered in a future rulemaking on the reallocation of this portion of the spectrum. <u>Sixth R&O</u> ¶ 80.

We urge the Commission on reconsideration (not in some later proceeding) to require that new users of the recaptured broadcast spectrum compensate broadcasters for the cost of forced relocation to the core spectrum. The transition to DTV will impose heavy financial burdens on broadcasters. Compensation for relocation would avoid yet an additional burden of spectrum recovery which is particularly onerous for small and

Sixth Further Notice, 11 FCC Rcd. at 10980.

Joint Comments IX at 17.

Just as PCS entrants were required to compensate the microwave incumbents PCS replaced and Mobile Satellite Service entrants will be required to guarantee payment to the incumbents of all relocation expenses, so the newcomers to the television broadcast band should have the same responsibilities. See e.g., In re. Amendment of Section 2.106 of the Rules to Allocate Spectrum at 2 GHz for Use by Mobile Satellite Services, 6 Comm. Reg. (P & F) 1025, ¶ 42 (1997). Where public safety is to use the recaptured spectrum, the relocating broadcaster could be compensated out of a pool of funds generated by other auction winners.

noncommercial stations and which falls arbitrarily on some stations but not others.

Moreover, a decision now to require new users of broadcast spectrum to compensate actual out-of-pocket relocation costs will provide stations with much-needed certainty, particularly those 68-89 licensees with both an NTSC and a DTV channel outside of the projected core. With no assurance that the costs of the second move will be reimbursed, it may be difficult for these stations to raise funds to construct the first DTV facility. Reassuring licensees of compensation would also conserve FCC resources as out-of-core DTV licensees will be less likely to challenge assignments if they will be compensated for their subsequent moves.

## C. THE COMMISSION SHOULD RESOLVE UNCERTAINTIES REGARDING NEW RULES FOR TRANSLATORS AND LPTVs.

As the Commission has recognized, translators and LPTVs provide an important service to the public. For example, in many parts of the country, particularly in areas of varying terrain, translators provide much needed fill-in service within the coverage area of the mother, full-power station. It is important, therefore, that translators and LPTV service be sustained during and after the transition to DTV, consistent with their essential and clearly-stated secondary status. Petitioners support the Commission's efforts to alleviate the burden on displaced NTSC translators and LPTVs. However, some of the technical changes and relaxations of the current interference rules the Commission adopted (Sixth R&O ¶ 145-47), could undermine the public's service from full-power stations. Several precautionary steps are therefore called for.

First, delay in the issuance of OET Bulletin No. 69 has prevented stations, both full-power and secondary, from assessing coverage or evaluating predicted interference.

In the new rules for LPTVs and translators alone, OET Bulletin No. 69 is referenced in three

separate sections. As stated above, we urge the Commission to release the OET Bulletin No. 69 so that these rule changes can be properly evaluated.

Second, because the interference standards for processing and granting displaced relocation requests of translators and LPTVs have been relaxed, vigilance in policing cases involving actual interference to full-power stations must be increased. The new relaxed processing standards, which are based only on interference predictions, may increase the risk that real-world interference will result. In many cases it is difficult to detect interference, because, when the public experiences a degraded picture, it does not always know the source, let alone report the interference. The Commission must be prepared to require translators and LPTVs to reduce power or cease operations when actual interference is caused to NTSC and DTV stations.

Third, LPTVs and translators should not be accorded grandfathered status inside the NTSC Grade B contour of DTV stations that are subject to the 1000 kW power cap or that have not yet built out their full facilities.

### D. THE COMMISSION SHOULD RECONSIDER THE 5-KM RULE.

The new rules provide that applications for authority to construct or modify DTV facilities may specify an alternate location for the DTV transmitting antenna within 5 km of the DTV allotment reference coordinates, without regard to interference that might be caused or received. Sixth R&O ¶  $102.\frac{50}{}$  Broadcasters disagreed with this approach when

Although the Sixth R&O indicates at ¶ 102 that broadcasters may "locate their transmitting facilities anywhere within a <u>three-mile radius</u> of their existing antenna site coordinates," (emphasis added), the rule in question provides a 5 km radius. The two are not identical -- the area of flexibility in the rules is slightly larger (5 km is 3.1 miles). We assume the Commission meant 5 km.

originally proposed, <sup>51</sup>/<sub>2</sub> and Petitioners continue to believe it is unwise. A decision to move a transmitter -- even just 5 km -- may significantly affect other stations. In some cases, a move 10 km away may cause no interference. In others, a relocation even less than 5 km away may cause significant harm. Exhibit 13 shows how moving a station in Fort Wayne, Indiana just 5 km increases the interference to a co-channel Toledo station by about 14%, <sup>52</sup>/<sub>2</sub> affecting an additional 8,356 people.

Petitioners therefore urge the Commission to adjust its 5-km rule. First, for collocated adjacent channel NTSC and DTV cases, the Commission should refrain from granting automatic flexibility, with the exception of cases where both stations involved consent to the move. Otherwise, moves for collocated adjacent channel DTV stations should be evaluated like all other requests for facility changes. Second, for all other stations wishing to relocate within a 0.1 to 5 km radius, we urge the Commission to require such stations to submit an interference showing. If the Commission determines that the interference caused is serious and substantial, the Commission should provide the public with the opportunity to comment. If the proposed relocation will cause no or *de minimis* interference, the Commission can expeditiously process the request with no public comment. Such an expedited process would preserve the Commission's desire to provide broadcasters with flexibility (which should, in particular, assist stations in the top markets subject to the expedited buildout schedule) but also would preserve the integrity of the DTV Allotments/Assignments.

 $<sup>\</sup>underline{\underline{\text{See}}}$  Joint Comments IX at 14.

The interference increases from 1298.9 sq. km and 11.6% of the co-channel station's service area to 1483.5 sq. km and 13.3% of that station's service area.

### E. THE COMMISSION SHOULD REMOVE UNCERTAINTIES REGARDING FACILITY CHANGES.

The <u>R&Os</u> and the new rules contain ambiguities regarding power level changes, channel changes, site changes, and antenna height changes -- ambiguities that will make it difficult for stations to request (and the Commission to process requests for) facilities changes. In the paragraphs that follow we attempt to highlight areas of uncertainty, so as to specify the clarifications that would be helpful.

### 1. <u>Different Treatment Of Existing And New Licensees.</u>

The <u>Sixth R&O</u> and the DTV Rules, at least in some instances, appear to apply different criteria and procedures to (i) existing DTV licensees seeking to change the channel they were assigned, even when the existing licensee is seeking to use a channel not allotted to the community in the DTV Table of Allotments and (ii) new broadcasters seeking a DTV channel at some future time. Section 73.622(a), for example, distinguishes between "requests to amend the DTV Table to change the channel of an allotment in the DTV table" (which are evaluated using the engineering criteria in Section 73.623(c)) and "requests to amend the DTV table to add a new allotment" (which are evaluated using the geographic spacing criteria in Section 73.623(d)). Section 73.622(a) maintains the distinction with respect to spectrum requirements: petitions for the "addition of a new allotment" must

As Section 73. 622(a) states, "requests for the addition of new DTV allotments" and "requests to change the channels allotted to a community" both require a petition for rulemaking to amend the table. If an existing licensee were seeking to swap already-allotted channels with an existing licensee in the same community, no petition would be required.

specify a channel between 2 and 51, and petitions for a "change in the channel of an initial allotment" must specify a channel between 2 and 59.54/

These distinctions suggest that an existing licensee requesting a modification of its allotment is subject only to the engineering interference test. However, Section 73.623(d) clouds the issue because it does not appear to maintain the distinction between existing licensees and newcomers. Section 73.622(d)(1) provides that the reference coordinates *of an initial DTV allotment* are the coordinates of its paired NTSC station, unless the licensee moves its transmitting facilities more than 5 km, in which case, the coordinates must comply with the engineering criteria of Section 73.623(c). By contrast, Section 73.622(d)(2) provides that the reference coordinates of *a DTV allotment not included in the initial DTV Table* will be in the order amending the table (to add the allotment) and that these must comply with the engineering criteria of 623(c) and the geographic spacing of 623(d). Thus, it is unclear whether an existing licensee seeking to move more than 5 km and change its DTV channel is subject solely to the engineering criteria (Section 73.622(d)(1)) or to both engineering and spacing criteria in accordance with Section 73.622(d)(2). Moreover, it is

The Sixth R&O seems to confirm this bifurcated structure. Section VII of the Sixth R&O indicates that "engineering criteria" apply to "modification of allotments" (which includes channel changes), ¶ 222, and that the "geographic spacing" applies to "adding future allotments." ¶ 221. Although the Sixth R&O does not explicitly indicate the two are mutually exclusive categories, certainly Section VII is constructed to so imply.

Or at least, so it suggests. One might read the sentences in question, in Section 73.622(d), to apply geographic spacing to the reference coordinates of the channel allotment and then to apply interference criteria to the actual location of the transmitter. Petitioners request clarification of this point.

To some extent, of course, it is illogical to require a broadcaster to satisfy both geographic spacing and interference criteria (the first already accommodates the second).

(continued...)

unclear whether the rule allowing licensees to move automatically within a 5 km radius applies to newcomers as well as to existing DTV licensees. Accordingly, Petitioners respectfully request the Commission clarify these two aspects of Section 73.622(d).

### 2. Maximum Power And Antenna Heights For Existing Licensees.

The Commission could provide further clarity by providing more guidance on how an existing licensee should calculate the maximum power level and antenna height when it seeks to modify its facilities or change its channel.

Take, for example, a station that wants to decrease its antenna height and adjust its power accordingly. Or take, as another example, a station that wants to move its transmitter more than 5 km from the DTV allotment reference coordinates and needs to calculate its new power and antenna height. Section 73.622(f)(1) provides that "maximum power and maximum antenna heights for allotments included in the initial DTV Table of Allotments are in Appendix B" to the Sixth R&O. Section 73.622(f)(3) further provides that DTV licensees may request increases in these initial specifications "up to the maximum permissible limits on DTV power and antenna height set forth *in this section* or up to that needed to provide the same geographic coverage area as the largest station within their

 $\frac{56}{}$  (...continued)

Broadcasters urged in their comments that the Commission employ engineering criteria for evaluating both modifications to the table and for considering new allotments by new applicants. Joint Comments IX at 52-53. Indeed, even the Sixth R&O recognizes that engineering criteria may allow more efficient use of spectrum and states that the Commission will revisit its allotment criteria at some time during the transition. Sixth R&O ¶ 221. Petitioners continue to encourage the Commission to employ a contour protection methodology rather than a geographic spacing approach.

market."527 However, the emphasized reference is ambiguous. Subsections (4)-(6) of Section 73.622(f), for example, do not appear to set forth maximum power and antenna heights for current DTV stations. Rather, they explicitly address only the maximum power levels and antenna heights for DTV stations that operate on allotments *created subsequent* to the initial DTV Table. Petitioners urge the Commission to clarify how existing licensees making facility changes calculate appropriate power levels and antenna heights, and specifically whether Subsections (4)-(6) nevertheless set the maximum power level and antenna height for the DTV Allotments/Assignments made in the Sixth R&O.

The new rules are similarly unclear with respect to the maximum power level and antenna height permitted for a current DTV licensee that wants to change its channel. This situation would appear not to be governed by Section 73.622(f)(1) because, as just described, this section applies to allotments included in the initial DTV table. While Subsections (4)-(6) of Section 73.622(f) might appear to govern the situation, we have already shown that, at least for some purposes, the Commission means to distinguish between new DTV allotments created for existing broadcasters (*i.e.*, channel changes to the initial table) and new allotments created for new broadcasters. If Sections (4)-(6) do not apply to all allotments created subsequent to the initial DTV Table of Allotments -- but only to allotments for new licensees -- then the rules appear to lack any guidance governing power and antenna height calculations for the existing broadcaster seeking a new DTV channel.

Footnote 70 of the Sixth R&O states that the Commission will entertain requests for increases of power above the 1000 kW level where such additional power is required to "provide service to the station's Grade B contour and would not result in additional interference."

Accordingly, the Petitioners urge the Commission to clarify the rules governing power levels and antenna heights for existing licensees that seek to change their channels.

# F. THE COMMISSION SHOULD REMOVE UNCERTAINTIES REGARDING THE APPLICATION PROCESS SO THAT STATIONS CAN COMMENCE CONSTRUCTION.

The <u>Fifth R&O</u> (¶ 67) states that the Commission "will soon issue" a Public Notice detailing construction application procedures for broadcasters. As of the date this pleading was drafted, no notice has been issued. In the meantime, listed below are discrete issues regarding the application process that the Petitioners respectfully request the Commission consider and clarify in this reconsideration process.

### 1. Clarification Regarding Minimal Antenna Height Changes.

Section 73.622(d) provides that the reference coordinates of an initial DTV allotment are the coordinates of the analog television station with which it is paired. But most stations will be unable to mount DTV antennas at exactly the same height as their existing NTSC antennas; they will need to deviate from the height specification by several meters. Many will stack their DTV antennas above (or below) their NTSC antennas. The Construction Permit Application (Appendix D to the Fifth R&O) suggests that if the station were to deviate downwards, no new showings would be required, but if the station were to deviate upwards even just one meter, a showing of no increased interference would need to be submitted pursuant to Section 73.623(c).

Petitioners urge that a station should not be required to make a "no new interference" showing when it is simply stacking its antennas and deviating a minimum number of meters (e.g., no more than 10 meters) from the antenna HAAT specified in

Appendix B. The new interference caused by such an increase in antenna height will be *de minimis*.

### 2. Delays In Processing Due To Canadian And Mexican Allotments.

The absence of final decisions with Canada and Mexico regarding DTV

Allotments along the borders and within the "coordinated areas" (and, indeed, with respect to Canada, the absence of a definition of the scope of the "coordinated area") leaves a large number of stations in a state of uncertainty that may impede the rapid buildout the Commission and the industry have supported. The Sixth R&O notes that the Commission has been coordinating for some time with Canada and Mexico on DTV allotments in the border areas, that it has "coordinated" with the relevant administrations, and that it "believe[s] that [the DTV Allotments/Assignments] will be generally acceptable to them."

Sixth R&O ¶ 171. On the other hand, it notes that "minor adjustments" will be necessary to conform the DTV Allotments/Assignments to agreements subsequently reached. Id. And the Commission concedes that some of the channels specified in the DTV Table are not fully compliant with the existing U.S.-Mexican and U.S.-Canadian agreements. Sixth R&O ¶ 205 n.368.<sup>28/</sup>

We recognize that the coordination process with Canada and Mexico will have to be ongoing to accommodate U.S. changes adopted pursuant to the reconsideration process. Because stations with expedited buildout schedules will need to make equipment purchases

A subsequent news release from the Commission indicates the Commission has signed a Memorandum of Understanding with the Mexican government and that the Commission anticipates completion of a coordinated table within six months. However, that coordinated table has apparently not yet been completed, and no news of the sort has been released with regard to Canada.

(components of which are channel-specific) in the very near future, Petitioners respectfully urge the Commission to expedite completion and coordination of the tables and to make every effort to minimize disruptive changes for stations that are satisfied with their DTV assignments and have begun buildout pursuant thereto.

### 3. Accommodations For Pending Proposals To Change Facilities.

In the <u>Fifth R&O</u>, the Commission indicated that it will process DTV construction permit applications within days, if the applicant is able to certify that it complies with the specifications of <u>Appendix B</u> (and certain other criteria). <u>Fifth R&O</u> ¶ 72. But construction permits requesting deviations from these specifications will take longer to process. <u>Id.</u> Petitioners urge the Commission to give top processing priority to such requests in the major markets where many stations face expedited buildout schedules and where such requests may have an impact on equipment purchases.

## V. THE COMMISSION SHOULD RECONSIDER AND ADDRESS OTHER ISSUES CRITICAL TO AN EFFECTIVE DTV IMPLEMENTATION.

### A. THE COMMISSION SHOULD ENSURE MINIMUM RECEIVER STANDARDS.

Petitioners commend the Commission for designing the DTV

Allotments/Assignments based on the receiver noise figures recommended by the

Broadcasters' Caucus Technical Committee -- a 10 dB noise figure for the VHF band<sup>59/</sup> and a 7 dB noise figure for the UHF band. Sixth R&O ¶ 193. The Commission stopped short, however, of requiring receiver manufacturers to design tuners that perform at least to these minimum standards. As Broadcasters have emphasized repeatedly, we will fail in our

The VHF noise figure includes a 5 dB atmospheric noise adjustment.